

corrosion and ultraviolet-resistant protective shield layer that enables said silver layer to retain spectral hemispherical reflectance and high optical clarity throughout the UV and visible spectrum when used in solar reflectors, said protective shield layer incorporating UV absorbers and, comprising: an overlay of a transparent multi-polymer film of  $40-60 \text{ g/m}^2$  and a thickness range of 2-8 mil adhered to an exposed surface of said protective layer.

13. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is an acrylic polymer.

14. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is selected from the group consisting of polycarbonate, polyester, polyethylene naphthalate or a fluoropolymer.

15. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is adhered to the exposed surface of the protective layer by an adhesive.

16. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is adhered to the exposed surface of the protective layer by a solvent weld.

17. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is adhered to the exposed surface of the protective layer by a thermal weld.

18. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is adhered to the exposed surface of the protective layer by an ultrasonic weld.

19. A method for making a silver mirror, comprising:

(a) providing a polymeric substrate;  
(b) bonding a specular-reflective silver layer to said polymeric substrate;  
(c) bonding a protective layer of a transparent film-forming polymer to said silver layer; and  
(d) adhering a protective shield layer that enables said silver layer to retain spectral hemispherical reflectance and high optical clarity throughout the UV and visible spectrum when used in solar reflectors, said protective shield incorporating UV absorbers and comprising a transparent multipolymer film of  $40-60 \text{ g/m}^2$  and a thickness range of 2-8 mil on the protective layer.

20. The method of claim 19, wherein the ultraviolet incorporated transparent multipolymer is acrylic.

21. The method of claim 19, wherein the ultraviolet incorporated transparent multipolymer is selected from the group consisting of polycarbonate, polyester, polyethylene naphthalate or

fluoropolymer.

22. The method of claim 19, wherein the step of adhering comprises gluing or welding.

as

cont

**CORRECTED VERSION OF THE AMENDED CLAIMS**

12. In a silver mirror, comprising a polymeric substrate, a specular-reflective silver layer overlying and bonded to said substrate, and a protective layer of a transparent film-forming polymer overlying and bonded to an exposed surface of said silver layer, the improvement of a corrosion and ultraviolet-resistant protective shield layer that enables said silver layer to retain spectral hemispherical reflectance and high optical clarity throughout the UV and visible spectrum when used in solar reflectors, ~~said protective shield layer~~ incorporating UV absorbers and, comprising: an overlay of a transparent multi-polymer film of 40-60 g/m<sup>2</sup> and a thickness range of 2-8 mil adhered to an exposed surface of said protective layer.
13. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is an acrylic polymer.
14. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is selected from the group consisting of polycarbonate, polyester, polyethylene naphthalate or a fluoropolymer.
15. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is adhered to the exposed surface of the protective layer by an adhesive.
16. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is adhered to the exposed surface of the protective layer by a solvent weld.
17. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is adhered to the exposed surface of the protective layer by a thermal weld.
18. The silver mirror of claim 12, wherein the ultraviolet incorporated transparent multipolymer film is adhered to the exposed surface of the protective layer by an ultrasonic weld.
19. A method for making a silver mirror, comprising:
  - (a) providing a polymeric substrate;
  - (b) bonding a specular-reflective silver layer to said polymeric substrate;
  - (c) bonding a protective layer of a transparent film-forming polymer to said silver layer; and
  - (d) adhering a protective shield layer that enables said silver layer to retain spectral hemispherical reflectance and high optical clarity throughout the UV and visible spectrum when used in solar reflectors, said protective shield incorporating UV absorbers and comprising a

transparent multipolymer film of 40-60g/m<sup>2</sup> and a thickness range of 2-8 mil on the protective layer.

20. The method of claim 19, wherein the ultraviolet incorporated transparent multipolymer is acrylic.

21. The method of claim 19, wherein the ultraviolet incorporated transparent multipolymer is selected from the group consisting of polycarbonate, polyester, polyethylene naphthalate or fluoropolymer.

22. The method of claim 19, wherein the step of adhering comprises gluing or welding.